

**HACKETTSTOWN REGIONAL MEDICAL CENTER
NURSING POLICY MANUAL**

PATIENT CONTROLLED ANALGESIA (PCA)

Effective Date: 11/1/1993

Cross Referenced:

Reviewed Date: 8/2008

Revised Date: 10/13

Policy No: 8620.24B

Origin: Division of Nursing

Authority: Chief Nursing Officer

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SCOPE

All RNs in Inpatient and Outpatient Areas

PURPOSE

To outline the management of a patient on Patient Controlled Analgesia (PCA)

DEFINITIONS

PCA Pump function allows patient to receive a dose only when the patient requests by pushing the pendant.

PCA + Continuous function allows the pump to administer a continuous dose of narcotic and still allows the patient to request the medication by pushing the pendant for supplemental dose.

Continuous function administers a prescribed amount of narcotic continuously with no patient access to supplemental doses.

POLICY

Patient Controlled Analgesia (PCA) is a frequent modality used for pain management in appropriately identified patients. The patient must understand and demonstrate how to use the PCA. For that reason, a patient who is excessively sedated, confused or has cognitive limitations is not an appropriate patient for PCA.

Provider must use the *Adult Patient Controlled Analgesia (PCA) IV Orders* form.

PCA is defined by HRMC as a high risk medication, therefore two nurses must independently check orders and pump set up upon initiation, admission/transfer to Nursing Unit, and patient's return to Unit after testing **or** when any changes are made to the PCA infuser settings.

1. Drug to be infused
2. Mode (PCA and continuous or PCA)
3. Loading does may be ordered at the beginning of therapy
4. PCA dose
5. Lockout interval
6. Continuous dose may be ordered
7. 4-hour limit **must** be ordered
8. Must have IVF order to infuse with PCA

Medications, such as antibiotics, should be piggybacked into the main IV tubing. If patient is to receive blood or any other incompatible piggyback, a second line must be started.

PROCEDURE

A. Equipment Set up

1. PCA Plus 3 Infuser with stand
2. PCA tubing with integral antisiphon valve and injector
3. IV set up
4. Pre-Filled narcotic vial as per order
5. Key located in the pyxis

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B. Assessment

1. At initiation of therapy, the nurse will assess the patient q 15 min X 4, the q 1 hour X 4, then q 4 hours until discontinued. This sequence of assessment is also repeated when boluses are given or pump setting is getting changed.
2. The following are assessed in the patient and recorded on PCA flow sheet:
 - a. Vital signs (HR, BP, RR, O2 Sat)
 - i. RR<10/minutes requires immediate attention. Stop PCA, and follow respiratory depression orders from PCA order form.
 - ii. Hypotension (SBP<90mmHg): Stop PCA, and follow respiratory depression orders from PCA order form.
 - iii. O2 Sat < 90%. Stop PCA and notify physician.
 - b. Level of sedation- if Level 3-4 stop PCA and notify physician.
 - c. Pain score- if unable to control patient's pain, notify physician.
3. Assess the IV line for patency and symptoms of possible infiltration as per IV protocol. Always trace lines from the vial/pump to the patient's appropriate IV site.
4. PCA line must be the primary IV line
5. Nausea and vomiting
 - a. If nausea and vomiting occur, the nurse will perform a G.I. assessment.
 - b. The nurse will administer an antiemetic, if ordered.
 - c. The nurse will notify provider if nausea and vomiting persists
6. Inadequate analgesic:
 - a. Check integrity of IV site.
 - b. Check PCA infuser.
 - c. Notify physician.

C. Infection Control

1. Change IV tubing according to IV protocol. Change PCA syringe as per Pharmacy and manufacturer's guidelines.

D. Clearing PCA

1. Clear the PCA infuser every 4 hours after recording on the PCA flow sheet

E. Discontinuation of PCA

1. Check physician's order for discontinuation.
2. Continue IV solution with rate or saline lock as ordered.
3. Anticipate need for different type of analgesic (i.e. oral or parenteral) and obtain order if applicable.
4. Waste remaining narcotic in Pyxis as per policy.
5. Clear history on machine.
6. Place PCA infuser in dirty utility room for cleaning.

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F. Patient Education

1. Instruct the patient on the use of the infuser.
 - a. differentiate between nurse call bell and PCA button
 - b. reinforce the lockout with patient
2. **ONLY THE PATIENT MAY PUSH THE BUTTON.** Make patient and any caregivers aware of this.
3. Encourage patient to push button when they feel pain and not to delay and wait until pain is severe.
4. Discuss possible side effects with patient and interventions available
 - a. sedation
 - b. pruritis
 - c. nausea/vomiting: antiemetic medication

G. Documentation

The nurse will document the following on the PCA flow sheet: medication type, PCA orders, and patient Assessment including Vital signs as outlined on flowsheet. The nurse will record every 4 hours on the PCA flow sheet the following:

1. Completed doses
2. Denied doses
3. Total drug given (milligrams)
4. Clearing the pump verification

The nurse will document in the medical record:

1. Complications and/or side effects managed
2. Communications with provider
3. Education completed

REFERENCES

Authorized and Unauthorized (“PCA by Proxy”) Dosing of Analgesic Infusion Pumps. American Society for Pain Management Nursing. ASPMN. June, 2006.

Perry, Anne. Potter, Patricia. *Clinical Nursing Skills and Techniques, Patient Controlled Analgesia*. Mosby. 2010. p 380-382

